

Title (en)
CARBOTHERMIC PROCESSES

Title (de)
CARBOTHERMISCHE VERFAHREN

Title (fr)
PROCÉDÉS CARBOTHERMIQUES

Publication
EP 2121521 A4 20110928 (EN)

Application
EP 07845424 A 20071221

Priority
• AU 2007001986 W 20071221
• AU 2007900009 A 20070102

Abstract (en)
[origin: WO2008080188A1] A mass of solid aluminium carbide containing product is produced by injecting particulate alumina into a bath (30) of molten aluminium metal; and injecting carbonaceous material, consisting of, containing or yielding carbon, into the bath (30). The bath (30) of molten aluminium metal is maintained at a superheated temperature to heat and react carbon with molten aluminium to produce solid aluminium carbide which mixes with alumina to form a mass (36) containing entrapped gas and entrapped molten aluminium metal and having a bulk or apparent density less than aluminium. The mass is allowed to accumulate as a mass of solid aluminium carbide containing product on the upper surface of the bath. The carbonaceous material is a hydrocarbon material or is produced by pyrolysis, decomposition or cracking of a hydrocarbon material.

IPC 8 full level
C01B 31/30 (2006.01); **C22B 5/04** (2006.01); **C22B 5/10** (2006.01); **C22B 21/02** (2006.01)

CPC (source: EP US)
C22B 5/06 (2013.01 - EP US); **C22B 5/10** (2013.01 - EP US); **C22B 21/02** (2013.01 - EP US)

Citation (search report)
• [XP] WO 2007012123 A1 20070201 - SAYAD-YAGHOUBI YAGHOUB [AU]
• [XI] US 4334917 A 19820615 - KIBBY ROBERT M
• [XI] US 4177060 A 19791204 - TYLKO JOZEF K [GB]
• See references of WO 2008080188A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008080188 A1 20080710; AU 2007339733 A1 20080710; AU 2007339733 B2 20130822; CA 2674121 A1 20080710; CA 2674121 C 20150526; CN 101616867 A 20091230; CN 101616867 B 20120208; EA 015053 B1 20110429; EA 200970664 A1 20100226; EP 2121521 A1 20091125; EP 2121521 A4 20110928; JP 2010514939 A 20100506; US 2010064850 A1 20100318; US 7896945 B2 20110301

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